

REMARKS

Claims 1 and 18 have been amended to recite an amount of eluted fluoride ion detected in a Fenton's stability test of the fluoropolymer. Support is found, for example, at page 4, lines 15-19 and at page 22, line 29-page 23, line 9 of the specification.

In response to the objection, claim 20 has been amended to depend from claim 18.

Review and reconsideration on the merits are requested.

Claims 1-5, 7-8, 17-21 and 23-24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,150,426 to Curtin in view of U.S. Patent 3,085,083 to Schreyer as evidenced by the definition of "electrolyte" in Hawley's Condensed Chemical Dictionary, 14th Edition, 2002. Claims 1-8 and 17-24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over WO 2004/018527 to Tatemoto in view of Schreyer, where US 2005/0228127 was cited as the English language equivalent of Tatemoto.

Applicants traverse, and respectfully request the Examiner to reconsider in view of the amendment to the claims and the following remarks.

The electrolyte membrane of claim 1 (and the immobilized active substance material of claim 18) comprises a fluoropolymer containing acid/acid salt groups and having -CF₂H groups at polymer chain terminals. Furthermore, the electrolyte membrane (immobilized active substance material) is stable against Fenton reagent [OH radicals] and elution of fluoride ion from the fluoropolymer is not more than 12 ppm.

Curtin and Tatemoto were cited as disclosing an electrolyte membrane.

The Examiner also considered Schreyer as providing motivation to combine for the reason that terminating the polymer in a highly stable -CF₂H group is said to add to the thermal stability and corrosion resistance of the polymer.

However, the prior art does not disclose an electrolyte membrane or immobilized active substance material comprising a fluoropolymer having -CF₂H groups which has an eluted fluoride ion concentration of not higher than 12 ppm in a Fenton's reagent-based stability test.

Therefore, the membrane and immobilized active substance material of the invention are unobvious over the cited prior art.

Furthermore, as discussed in the Remarks portion of the Amendment filed September 17, 2009, investigators in the field of polymers containing acid/acid groups believe that -CF₂H group is an unstable functional group resulting in the problem of gradual polymer decomposition. This demonstrates the unobviousness of the membrane and immobilized active substance material of the invention exhibiting a low fluoride ion elution.

For the above reasons, it is respectfully submitted that the claims as amended are patentable over the cited prior art, and withdrawal of the foregoing rejections under 35 U.S.C. § 103(a) is respectfully requested.

Withdrawal of all rejections and allowance of claims 1-8 and 17-27 is earnestly solicited.

In the event that the Examiner believes that it may be helpful to advance the prosecution of this application, the Examiner is invited to contact the undersigned at the local Washington, D.C. telephone number indicated below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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